

The opinion in support of the decision being entered today was **not** written
for publication and is **n** **t** binding precedent of the Board.

Paper No. 16

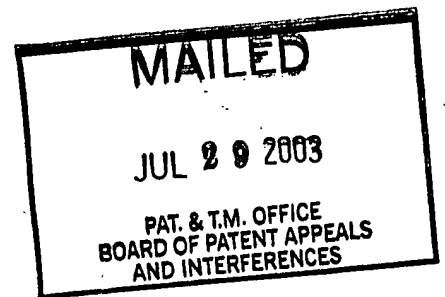
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TRUNG T. DOAN

Appeal No. 2002-2158
Application No. 09/652,713

ON BRIEF



Before COHEN, ABRAMS, and STAAB, Administrative Patent Judges.
ABRAMS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 36 and
37, which are all of the claims pending in this application.

We REVERSE AND ENTER A NEW REJECTION UNDER 37 CFR § 196(b).

BACKGROUND

The appellant's invention relates to a chemical dispensing system for semiconductor wafer processing. The claims on appeal have been reproduced below.

The single prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Hurtig	5,289,222	Feb. 22, 1994
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The examiner has rejected claims 36 and 37 under 35 U.S.C. § 102(b) as being anticipated by Hurtig.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the Answer (Paper No. 12) for the examiner's complete reasoning in support of the rejections, and to the Brief (Paper No. 11) and Reply Brief (Paper No. 13) for the appellant's arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art reference, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

As explained in the appellant's specification, coating materials commonly are applied to semiconductor wafers by flowing liquid coating material onto the top surface of a wafer while it is spinning on a rotating spin chuck. The rotation causes the coating material to flow outwardly over the wafer. In practice, however, some excess coating material tends to collect at and form a bead around the edge of the wafer. This commonly is removed by dispensing a solvent along the edge of the wafer, which then is removed along with the excess coating that had formed the edge bead. The appellant's invention is directed to a device for removing the solvent and the bead. The claims before us express the invention in the following manner:

36. A device for an edge bead, comprising:

a dispenser configured to release a chemical toward said edge bead; and

a splash controller around said dispenser, physically unattached from said edge bead, and configured to draw said chemical toward said splash controller, wherein said splash controller is configured to generate a gas pressure around said edge bead that is lower than an ambient gas pressure, and wherein said splash controller is configured to physically intercept said chemical.

37. The device in claim 36, wherein said splash controller is around said edge bead.

New Rejection By This Panel Of The Board

At the outset, pursuant to our authority under 37 CFR § 196(b), we enter the following new rejection:

Claims 36 and 37 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant views as the invention.

Claim 36 recites a splash controller that is “configured to draw said chemical toward said splash controller” and “configured to generate a gas pressure around said edge bead that is lower than an ambient gas pressure.” The common applicable definition of “configured” is “shaped,” of “draw” is “to cause to move toward,” and of “generate” is “to bring into existence.”¹ Thus, claim 36 requires that the splash controller be so shaped as to (1) cause the chemical to move toward it and (2) cause a gas pressure lower than an ambient gas pressure to be brought into existence around the edge of the bead. We also point out that the term “splash controller” is not present in the specification or in the original claims. However, as we understand the structure and operation of the invention from the specification, what is recited as the “splash controller” in the claims is “vacuum port 18,” an element to which suction is applied to create a “surround vacuum” that “controls solvent and particle splashing during the

¹See, for example, Merriam Webster's Collegiate Dictionary, Tenth Edition, 1996, pages 242, 351, and 485, respectively.

process of removing the edge bead” and improves the edge profile of the coating material as “the dissolved coating material and excess solvent is suctioned away” therethrough (page 4, lines 5-18). There is no description of the configuration of the suction ports shown in Figures 1 and 2, but they appear merely to be cylindrical tubes.

The second paragraph of 35 U.S.C. § 112 requires claims to set out and circumscribe a particular area with a reasonable degree of precision and particularity. In re Johnson, 558 F.2d 1008, 1015, 194 USPQ 187, 193 (CCPA 1977). In making this determination, the definiteness of the language employed in the claims must be analyzed, not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art. Id.

It is our view that one of ordinary skill in the art would deduce from the specification that the “splash controller” recited in the claims is the “vacuum port 18” described in the specification, if for no other reason than there simply is no other element of the disclosed invention to which this could apply. However, from our perspective, one of ordinary skill in the art would not be advised by the specification of what structure of the splash controller is “configured to draw” the chemical toward it and “configured to generate” a gas pressure that is lower than ambient (emphasis added in both cases), inasmuch as it would appear that it is the suction applied through the

splash controller and not the configuration of the splash controller that accomplishes these tasks. This matter is important because the appellant has argued on page 3 of the Brief that claim 36 distinguishes over the Hurtig apparatus on the basis of these “configured” limitations, in that the claimed splash controller is “configured to *draw toward itself* a particular chemical . . . [and] the Examiner has cited no portion of the [sic] Hurtig that indicates its guard is configured to draw toward itself any chemical.” However, the same can be said for the appellant’s disclosure, in that there is no explanation of how the configuration of the splash controller draws chemicals and generates a low gas pressure around the edge bead. Thus, if as the appellant contends, Hurtig is defective as an anticipatory reference because there is no disclosure which would support a conclusion that the configuration of element 104B causes a chemical to be drawn toward it, it would seem that claim 36 is indefinite for the same reason.

It is our opinion that the aforementioned situation causes the metes and bounds of claim 36 not to be determinable. Since the public must be apprised of exactly what a patent covers so that those who would approach the area circumscribed by the claims may more readily and accurately determine the boundaries of protection involved and evaluate the possibility of infringement and dominance, claim 36 does not comply with

the second paragraph of 35 U.S.C. § 112. See In re Hammack 427 F.2d 1378, 1382, 166 USPQ 204, 208 (CCPA 1970).

The Examiner's Rejection

Claims 36 and 37 stand rejected as being anticipated by Hurtig. However, when no definite meaning can be ascribed to certain terms in a claim, as is the case with claim 36, the subject matter does not become unpatentable, but rather the claim becomes indefinite. See In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Since it is clear to us that considerable speculation and assumptions are necessary to determine the metes and bounds of what is being claimed in claim 36, and since a rejection cannot be based upon speculation and assumptions, we are constrained to reverse the examiner's rejection. See In re Steele, 305 F.2d 859, 862, 134 USPQ 292, 295 (CCPA 1962). We hasten to point out, however, that this action should not be construed as an indication that the claimed subject matter would not have been anticipated by the cited reference. We have not addressed this issue, for to do so would require on our part the very speculation which formed the basis of our rejection under Section 112.

CONCLUSION

The rejection of claims 36 and 37 as being anticipated by Hurtig is not sustained.

Pursuant to 37 CFR § 196(b), claims 36 and 37 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

This decision contains new grounds of rejection pursuant to 37 CFR § 1.196(b). 37 CFR § 1.196(b) provides that "[a] new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new grounds of rejection to avoid termination of proceedings (37 CFR § 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

[illegible]

-) BOARD OF PATENT
-) APPEALS AND
-) INTERFERENCES

Lawrence J. Stool

LAWRENCE J. STAAB
Administrative Patent Judge

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